WHAT IS CLAIMED IS:

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1. A method for processing information in a receiver of a multichannel optical communication system, comprising:

receiving a wavelength division multiplexed (WDM) signal having a symbol rate and comprising a plurality of non-intensity modulated optical information signals having a minimum channel spacing comprising a multiple of the symbol rate within 0.4 to 0.6 of an integer;

demultiplexing the non-intensity modulated optical information signals from the WDM signal;

converting each of the non-intensity modulated optical information signals to an intensity modulated optical information signal using an asymmetric interferometer; and

recovering a data signal from the intensity modulated optical information signal.

2. The method of Claim 1, wherein the minimum channel spacing comprises the multiple of the symbol rate within substantially 0.5 of the integer.

3. The method of Claim 1, wherein the symbol rate comprises a transmission bit rate of the WDM signal.

4. The method of Claim 1, wherein the asymmetric interferometer comprises an asymmetric Mach-Zender interferometer.

5. The method of Claim 1, wherein the asymmetric interferometer comprises two interferometer paths having a path length difference operable to create a one symbol period shift in the optical information signal.

6. The method of Claim 1, further comprising recovering the data signal as an electrical signal using a dual detector.

7. The method of Claim 1, wherein the non-intensity modulated optical information signal comprises a frequency-modulated optical information signal.

8. The method of Claim 1, wherein the non-intensity modulated optical information signal comprises a phase-modulated optical information signal.

9. An optical receiver for a wavelength division multiplex (WDM) optical communication system, comprising:

a demultiplexer operable to demultiplex a wavelength division multiplex (WDM) signal into a plurality of non-intensity modulated optical information signals;

an asymmetric interferometer operable to receive a corresponding one of the plurality of non-intensity modulated optical information signals;

the asymmetric interferometer operable to convert the non-intensity modulated optical information signal into an intensity modulated optical information signal; and

a detector operable to recover a data signal from the intensity-modulated optical information signal.

10. The optical receiver of Claim 9, wherein the WDM signal comprises a symbol rate and the non-intensity modulated optical information signals have a minimum channel spacing comprising a multiple of the symbol rate within 0.4 to 0.6 of an integer.

11. The optical receiver of Claim 10, wherein the symbol rate comprises a bit rate of the WDM signal.

12. The optical receiver of Claim 9, wherein the asymmetric interferometer comprises a Mach-Zender interferometer.

13. The optical receiver of Claim 9, wherein the asymmetric interferometer comprises two interferometer paths having a path length difference operable to generate a one-bit shift in the optical information signal.

14. The optical receiver of Claim 9, wherein the detector comprises a balanced dual detector.

15. The optical receiver of Claim 9, wherein the non-intensity modulated optical information signal comprises a frequency-modulated optical information signal.

16. The optical receiver of Claim 9, wherein the non-intensity modulated optical information signal comprises a phase-modulated optical information signal.

17. A method for communicating information in a wavelength division multiplexed (WDM) optical communication system, comprising:

transmitting each of a plurality of a data signals using non-intensity modulation of a wavelength disparate carrier signal, the carrier signals having a minimum channel spacing comprising a bit rate multiple within 0.4 to 0.6 of an integer;

converting the non-intensity modulation of the carrier signals into an intensity modulation using an asymmetric Mach-Zender interferometer; and

recovering the data signal using a detector coupled to an output of the Mach-Zender interferometer.

18. The method of Claim 17, wherein the asymmetric Mach-Zender interferometer comprises a path length difference of one bit and complementary outputs.

19. The method of Claim 18, wherein the detector is a dual detector coupled to the complementary outputs of the Mach-Zender interferometer.

20. The method of Claim 17, wherein the minimum channel spacing comprises the multiple of the symbol rate within substantially 0.5 of the integer.